

APES OBJECTIVES

FriRel: CHAPTER 9 Objectives - WATER RESOURCES

KEY OBJECTIVES: The main objectives of this chapter are to identify, and describe water resources and to understand how humans are managing and using this valuable resource.

26. The Availability of Water

- Briefly describe earth's water supply. Identify some of the largest sources of fresh surface water.
- Compare amounts of salt water and fresh water. Compare amounts of frozen fresh water and water available for human use.
- Define *watershed* and *groundwater*.
- Describe the major sources of groundwater. Discuss the Ogallala Aquifer experience.
- List the major pollutants of groundwater. Explain why cleanup of groundwater is so difficult.
- Explain the effects of unusually high & low amounts of precipitation.
- Describe ways that humans contribute to flooding. List strategies humans employ to minimize the risks of flooding.

27. Human Alteration of Water Availability

- Compare and contrast the roles of levees & dikes.
- Explain the benefits and costs of building dams.
- Explain the benefits and costs of building aqueducts.
- Describe the processes used to convert salt water in to fresh water.
- Describe measures that can be taken to reduce water losses through irrigation, industry, and home use.

28. Human Use of Water Now & in the Future

- Compare and contrast four methods of agricultural irrigation.
- Describe the major industrial & household uses of water.
- Summarize water use in the United States and the world.
- Discuss how water ownership & water conservation are important in determining future water availability.
- Distinguish between *riparian rights* and *prior appropriation* as to regulate water use.
- Summarize a key lesson learned from the following case studies: the Colorado River; Egypt's Aswan High Dam; the California Water Project; the James Bay project; the Aral Sea disaster.

VOCABULARY TERMS

• Aquifers	• Saltwater intrusion	• Dikes
• Unconfined aquifers	• Floodplain	• Dam
• Confined aquifers	• Oligotrophic	• Reservoir
• Water table	• Mesotrophic	• Fish ladders

<ul style="list-style-type: none">• Recharge	<ul style="list-style-type: none">• Eutrophic	<ul style="list-style-type: none">• Aqueducts
<ul style="list-style-type: none">• Springs	<ul style="list-style-type: none">• Impermeable surfaces	<ul style="list-style-type: none">• Desalinization
<ul style="list-style-type: none">• Artesian wells	<ul style="list-style-type: none">• Levee	<ul style="list-style-type: none">• Hydroponic agriculture
<ul style="list-style-type: none">• Cone of depression		